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# Performance Assurance for UESC Projects

Pacific Gas and Electric Company Roger Farzaneh, P.E.



#### **UESC Performance Assurance**

- When PG&E started its UESC Program 4 years ago, there were no clearly defined, or standard UESC Performance Assurance guidelines (FEMP has some guidelines in 2002)
- Many of PG&E's UESC customers have asked for some level of Performance Assurance as part of their project.
- PG&E offered Performance Assurance as part of some of its UESC Program.



# Performance Assurance Design

- Any UESC performance assurance needs to be meaningful, yet not overburden the project with excessive costs or risks.
- The costs of a simple Performance assurance measures that is responsive to the customers' needs can be included and financed in the implementation proposal.



## Performance Assurance Design

- PG&E, in conjunction with its implementation contractors, has developed simplified and customized performance assurance guidelines and strategies.
- PG&E's performance assurance does not guarantee energy savings, however its components collectively provide assurances that equipment installed will operate as designed.
- PG&E's simplified performance assurance plan results in most of the benefits of a performance guarantee program that have detailed and long-term M&V plan. PG&E's plan results in significantly lower overall cost for a typical one to three years.

#### PG&E's Performance Assurance

- The components of PG&E's Performance Assurance includes the following:
  - Full system commissioning to ensure that all project measures are functioning as designed.
  - One to three year Measurement & Verification (M&V) plan options
  - PG&E's retro-commissioning option including rebates or on-going monitoring based commissioning to ensure projects savings persist.
  - PG&E's Energy Efficiency Program incentive/rebate process has built-in measures by the CPUC to ensure energy savings are realized. This bring in another level of assurance for the UESC projects.



## Four elements of UESC Performance Assurance

- 1. Commissioning is performed at the end of each energy conservation measure. This ensures the installed equipment performs as intended by the IGA and design.
- 2. A simplified, and short (M&V) intended to ensure measures are working correctly after project acceptance. Generally the contractors prepare and present an annual M&V report to the customer.



## Four elements of UESC Performance Assurance (continued)

- 3. If the customers believe the system is not functioning on an optimal level, they can participate in PG&E's retro-commissioning program to identify and correct deficiencies. The program provides incentives to the customer if the deficiencies are corrected.
- 4. PG&E, in its Energy Efficiency Program is required to provide 5 years of energy savings for projects that receive incentives. All projects are subject to audits by the California Regulatory Commission. If the energy savings are not realized PG&E, may be subject to penalties.

### Conclusions

- PG&E has included Performance Assurance in its projects with the IRS and NASA Ames.
- Each program is different based on the varying customer needs.
- Each project includes commissioning, a simple M&V, as well as PG&E's own internal Energy Efficiency Program safeguards.
- PG&E's UESC Program realizes most of the performance assurance benefits at a fraction of the cost of a performance guarantee program.

